

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

020292

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on _____

Signature _____

Typed or printed name _____

Application Number

10/688,383

Filed

10/17/2003

First Named Inventor

le-Hong Lin

Art Unit

2617

Examiner

Brandon J. Miller

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

attorney or agent of record.

Registration number 43,721.

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34. _____

/Andrea L. Mays/

Signature

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30 July 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of 1 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:
Lin, et al.

**For: METHOD AND APPARATUS FOR
IDENTIFYING TRANSMITTERS IN A
WIRELESS COMMUNICATION SYSTEM
USING POWER PREDICTIONS**

Serial No.: 10/688,383

Group Art Unit: 2683

Filed: October 17, 2003

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attention: Brandon J. Miller
Examiner

Dear Sir:

Appellants respectfully request review of the final rejection mailed by the Office for the above-referenced application on January 30, 2007 ("the Final Office Action").

A Notice of Appeal is being filed concurrently herewith. This Request for Review is pursued for the reasons presented in the following pages.

Status of Claims

Claims 1-27 remain pending in this application. The Examiner maintains the rejections of claims 1-27 presented in the Office Action, dated January 30, 2007. In particular, the Examiner rejects claims 1-3 and 5-27 under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,920,329 to Kennedy et al. (hereinafter Kennedy) in view of U.S. Patent No. 6,445,917 to Bark et al. (hereinafter Bark). Claim 4 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Kennedy in view of Bark and U.S. Patent Application Publication No. 20020039905 to Remy (hereinafter Remy).

Appellant respectfully traverses the rejections and requests reconsideration and allowance of all pending claims.

Appellants believe the rejections contain clear factual deficiencies. In particular, the Examiner fails to properly set forth a *prima facie* case for the obviousness rejections, because the cited references, or the combination thereof, fail to teach or suggest every claimed feature. Additionally, the Examiner fails to provide a motivation to combine references that would reasonably lead one of ordinary skill in the art to make the specific combination argued by the Examiner.

The Cited References Fail to Teach or Suggest All Claim Limitations

Appellant's claims are directed to methods and apparatus for identifying transmitters in a wireless communication system based in part on predicted powers and actual measured power at a receiver. Each of independent claims **1, 13, 19, and 27**, as discussed in Appellant's Responses of April 29, 2007 and November 20, 2006, include similar features directed to identifying transmitters based on predicted powers from candidate transmitters and measured receive power. See, e.g., *Response*, dated April 29, 2007, at page 7.

In contrast, Kennedy is directed to determining where to place position location sensors in a communications network. *Kennedy*, Abstract. Kennedy is directed to the design of a position location network and is directed, in particular, to "assist[] in the pre-installation design of a mobile-appliance location determining system which utilizes a network infrastructure overlay location approach (*as opposed*

to techniques where the location is determined with modifications to the mobile-appliance) where equipment is installed within the wireless network base stations and/or switching centers to determine the mobile-appliance location." *Id.*, at Col. 1, ll. 26-33, (*emphasis added*). Thus, not only is Kennedy directed to pre-installation design of a system, rather than actual system usage, but Kennedy is directed to systems that do not perform position location through modifications of a mobile appliance.

Appellant previously submitted arguments summarize numerous deficiencies in the teachings of Kennedy. Appellant's arguments submitted in the Response, dated April 29, 2007, at pages 2-5 and in the Response, dated November 20, 2006, at pages 2-4, summarize various deficiencies in the Kennedy reference relative to claimed features.

In particular, Kennedy describes estimating the received signal power from a mobile station at various points in a grid spanning a coverage area. *Id.*, at Col. 4, ll. 35-38. Kennedy is not concerned with identifying a transmitter, because Kennedy estimates the received signal power assuming a simulated mobile station transmission. Thus, not only does Kennedy fail to describe identifying transmitters, but Kennedy assumes, for each point in the grid, that the identity of the transmitter is a mobile station at that location.

Moreover, Kennedy fails to teach or suggest any measured power of a received signal, and it is an express object of Kennedy "to provide a novel system and method of positioning location determining sensors based on estimated accuracies *without the necessity of actually measuring communication signals.*" *Id.*, at Col. 2, ll. 59-62 (*emphasis added*).

The Examiner concedes that Kennedy fails to teach or suggest every claimed feature of the independent claims. In particular, the Examiner concedes that Kennedy fails to teach or suggest "identifying a transmitter based on predicted powers for the transmitters and measured power for the received signal." *Office Action*, dated January 30, 2007, at page 2. The Examiner contends that Bark provides such a teaching, and that it would be obvious to one of ordinary skill in the art to make the combination and modification of Kennedy.

However, Bark is directed to mobile stations with event-based reporting. *Bark*, Title and Abstract. Bark describes operation of a mobile station in a radio

access network, where the mobile station reports to the radio access network occurrences of events or predetermined conditions. *Id.*, Abstract.

Thus, Bark is not directed or even related to the system planning environment of Kennedy, where the position location sensors have yet to be placed. Additionally, Bark is directed to mobile station event reporting, whereas Kennedy is directed to planning network infrastructure "*as opposed to techniques* where the location is determined with modifications to the mobile-appliance." *Kennedy*, at Col. 1, ll. 28-30, (*emphasis added*).

Combining mobile based event reporting of Bark with the infrastructure planning descriptions of Kennedy fails to cure the deficiencies in Kennedy. There is no actual infrastructure equipment yet deployed in Kennedy, and integrating event based reporting to the simulated mobile station fails to teach or suggest the claimed methods and apparatus of identifying a transmitter.

Indeed, Kennedy does not need to know an actual identity of a mobile station, because the infrastructure planning is based on a simulated mobile station transmission at each grid in the coverage area. Using an actual mobile station or simulating a mobile station having event based reporting provides no further teaching or suggestion of the claimed features. The inclusion of mobile station event reporting fails to address Kennedy's failure to describe any predicted powers for candidate transmitters or measured receive power.

Each of independent claims 1, 13, 19, and 27 is believed to be allowable for the reasons presented above and in the Responses, dated April 29, 2007 and November 20, 2006.

There Is No Motivation to Combine Kennedy With Bark In The Manner Suggested

There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

There is no teaching or suggestion to modify or combine the teachings of Kennedy with Bark in a manner that would result in Appellant's claims. Appellant discusses the lack of motivation in the Response, dated April 29, 2007, at pages 7-9.

Furthermore, Kennedy expressly teaches away from the modification argued by the Examiner. Kennedy expressly sets forth that an object of the invention is to determine the placement of the infrastructure equipment "*without the necessity of actually measuring communication signals.*" Kennedy, at Col. 2, ll. 59-62 (*emphasis added*).

Kennedy further expressly describes design of a position location network and is directed, in particular, to network infrastructure "*(as opposed to techniques where the location is determined with modifications to the mobile-appliance)* where equipment is installed within the wireless network base stations and/or switching centers to determine the mobile-appliance location." *Id.*, at Col. 1, ll. 26-33, (*emphasis added*).

In stark contrast, the Examiner argues that modifying Kennedy to combine the teachings of mobile station event-based reporting, where a mobile station reports occurrences of actual events during system operation. The Examiner's arguments fail to address the teachings away from the proposed combination or modification.

Indeed, because Kennedy relies on a simulated mobile station transmission to determine where to place infrastructure equipment, there is no possibility of a mobile station actually detecting an event. There is no actual mobile station, nor is there even infrastructure deployed.

Appellant contends there is no motivation to combine the references, and Kennedy expressly teaches away from the proposed combination.

Discussion of Dependent Claims

Claims 2-12, 14-18, and 20-26 depend from one of independent claims 1, 13, or 19 and are believed to be allowable at least for the reason that they depend from an allowable base claim. Appellant respectfully requests reconsideration and allowance of claims 2-12, 14-18, and 20-26.

Appellant petitions the Director of the United States Patent Office to extend the time for reply to the Office Action dated January 30, 2007 for three months and authorizes the charge as set forth in §1.17(a) to Deposit Account No. 17-0026. Appellant believes that the instant response is filed within the period for response provided in the Office Action of January 30, 2007. If there are any other fees due in connection with the filing of the response, please charge the fees to our Deposit

Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Appellants therefore respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

Dated: July 30, 2007

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